

JAN 09 2007

AVAGO TECHNOLOGIES, LTD.  
P.O. Box 1920  
Denver, Colorado 80201-1920

ATTORNEY DOCKET NO. 70020717-1

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Chee

Serial No.: 10/687,078

Examiner: Huffman, Julian

Filing Date: September 18, 2003

Group Art Unit: 2853

Title: Print Mechanism Utilizing an Optical Imaging Sensor to Sense the Print Medium

COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria VA 22313-1450

## TRANSMITTAL LETTER FOR RESPONSE/AMENDMENT

Sir:

Transmitted herewith is/are the following in the above-identified application:

- ☐ Response/Amendment ☐ Petition to extend time to respond  
☐ New fee as calculated below ☐ Supplemental Declaration  
☒ No additional fee (Address envelope to "Mail Stop Amendments")  
☒ Other: Reply Brief (Fee \$ \_\_\_\_\_)

CLAIMS AS AMENDED BY OTHER THAN A SMALL ENTITY						
(1) FOR	(2) CLAIMS REMAINING AFTER AMENDMENT	(3) NUMBER EXTRA	(4) HIGHEST NUMBER PREVIOUSLY PAID FOR	(5) PRESENT EXTRA	(6) RATE	(7) ADDITIONAL FEES
TOTAL CLAIMS		MINUS		= 0	X 50	\$ 0
INDEP. CLAIMS		MINUS		= 0	X 200	\$ 0
<input type="checkbox"/> FIRST PRESENTATION OF A MULTIPLE DEPENDENT CLAIM					+ 360	\$ 0
EXTENSION FEE	1 <sup>ST</sup> MONTH 120.00 <input type="checkbox"/>	2 <sup>ND</sup> MONTH 450.00 <input type="checkbox"/>	3 <sup>RD</sup> MONTH 1020.00 <input type="checkbox"/>	4 <sup>TH</sup> MONTH 1590.00 <input type="checkbox"/>		\$ 0
					OTHER FEES	\$ 0
					TOTAL ADDITIONAL FEE FOR THIS AMENDMENT	\$ 0

Charge \$ 0 to Deposit Account 50-3718. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 50-3718 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 50-3718 under 37 CFR 1.16, 1.17, 1.19, 1.20 and 1.21. A duplicate copy of this transmittal letter is enclosed.

Respectfully submitted,

Chee

By

Calvin B. Ward  
Attorney/Agent for Applicant(s)

Reg. No. 30,896

Date: Jan 9, 2007

Telephone No. (925) 855-0413

I hereby certify that this paper is being facsimile  
transmitted to the Patent and Trademark Office on  
the date shown below:

Date of facsimile: Jan 9, 2007

Typed Name: Calvin Ward

Signature: 

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The Examiner then looks to the statement in the first paragraph that the image in the region of the edge is a step function, as defining the broadest interpretation of what is meant by determining the location for at least one of the edges of the print medium from the formed image. First, the sentence above points out that algorithms for making this determination are known to the art. The portion discussed by the Examiner is merely one example of such an algorithm. Second, the claim requires that **the location be determined from the image formed by the position detector**. However, the Examiner has not pointed to any teaching in Endo of forming an image. In fact, Endo teaches using a predetermined threshold to define the edge of the print medium [127]. There is no teaching that the threshold is determined differently for each sheet of print medium, no less from an image of a portion of the sheet. Hence, Endo does not teach determining the location of the edge from an image of the print medium even if one were to accept the Examiner's definition of an image.

The Examiner further asserts that "the specification does not describe any structure which is capable of forming an image of the type described in the dictionary definition." In fact, Figure 2 of the specification clearly shows such a structure 20, and the paragraph beginning at line 30 of Page 3 refers to it as an imaging section. The final sentence of that paragraph explains that "light from the illuminated portion of the surface is imaged by the imaging section onto a sensor 21 with the aid of a lens assembly 22." Hence, the specification does indeed describe a structure capable of forming an image in accordance with the dictionary definition.

With respect to Claims 2 and 8, the Examiner looks to the teaching of Endo in which the presence or absence of the paper is determined by detecting the intensity of light reflected from the paper and comparing that to a predetermined threshold value as satisfying the limitation of determining a brightness value for the print medium. The Examiner cites the above mentioned paragraph [127] of Endo for support. As noted above, the passage refers to comparing the signal with a predetermined threshold that is not derived from the signal of the print medium when the detector is over the print medium. That signal depends on factors other than the brightness of the paper. Hence, absent further processing, the system of Endo does not determine a brightness value.



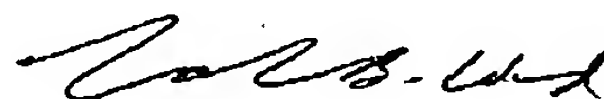
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With respect to the rejection of Claims 11-12 in view of Endo and Miyakawa, first, the Examiner argues that detecting whether a media is transparent and controlling the amount of ink deposited does prohibit altering the amount of ink based on a determination of the brightness of the medium. The issue is not whether the reference prohibits the claimed limitation, but rather whether the reference teaches the claimed limitation. The Examiner has the burden of showing the teaching. Applicant is not required to prove that the teaching is prohibited by the reference.

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Respectfully Submitted,



Calvin B. Ward  
Registration No. 30,896

Date: January 9, 2007

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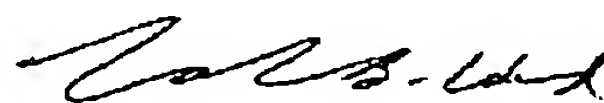
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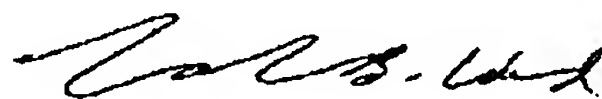
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